

ABSTRACT

In an error detection method of the present invention, as shown in figure 1, target code strings which are inputted in a discontinuous arrangement are subjected to a syndrome operation, and simultaneously, the target code strings which are inputted in a discontinuous arranged are subjected to a first error detection code operation while correcting the inter-data continuity by skipping the data so that the arrangement of the code strings have continuity. Then, error data positions and error data numerical values of the target code strings are calculated on the basis of a syndrome obtained in the syndrome operation, and only the error data position among the target code strings are subjected to a second error detection code operation again on the basis of the error data positions and the error data numerical values. Using the operation result, the operation result by the first error detection code operation is updated, thereby simultaneously performing ECC processing and EDC processing for the target code strings which are inputted in a discontinuous arrangement.